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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/705,258	11/10/2003	Steven L. Ingalsbe	1-21896	3208

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MACMILLAN, SOBANSKI & TODD, LLC
ONE MARITIME PLAZA - FOURTH FLOOR
720 WATER STREET
TOLEDO, OH 43604

EXAMINER

BINDA, GREGORY JOHN

ART UNIT PAPER NUMBER

3679

DATE MAILED: 01/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/705,258

Applicant(s)

INGALSBE ET AL.

Examiner

Greg Binda

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 7-9 and 12-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 10 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 20040223
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Election/Restrictions

1. Applicant's election without traverse of Species I shown in Figs. 1-3 in the reply filed on December 13, 2004 is acknowledged.
2. Claims 7-9 & 12-14 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on December 13, 2004.

Drawings

3. The drawings are objected to because they fail to show the following claim features:
 - a. The components of the constant velocity joint 10 assembled as described at page 7, line 3 and as recited in the claims.
 - b. A web engaging an inner surface of a cage as recited in claim 2 and in item (a) of claims 1 & 10.
 - c. All the limitations recited in claims 3 & 5 and in items (b) and (d) of claims 1 & 10.
 - d. A web engaging an inner surface of an outer member as recited in claim 4 and in item (c) of claims 1 & 10.
4. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet,

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even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 2 & 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Bright, US 1,071,693. Figs. 1, 2, 4& 5 show a constant velocity joint comprising: an outer race **A** with an opening defining an inner surface having a plurality of grooves **a1**, **a2** formed therein; an inner race **B** defining an outer surface having a plurality of grooves **b1**, **b2** formed therein; a cage **D** extending between the outer race and the inner race, the cage having an outer surface, an inner

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surface and a plurality of ball receiving apertures **d**, **d1**; a web **a** provided on the inner surface of the outer race that engages the outer surface of the cage; and a ball **C**, **C'** disposed in each ball receiving aperture of the cage. At page 1, lines 67-69, Bright discloses that the web could be formed on the outer surface of the inner race.

7. Claims 1, 2, 6, 10 & 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Welschof, US 4,156,353. Figs. 1-4 show a constant velocity joint comprising: an outer race 1 with an opening defining an inner surface 11 having a plurality of grooves 2 formed therein; an inner race 3 defining an outer surface 9 having a plurality of grooves 4 formed therein; a cage 6 extending between the outer race and the inner race, the cage having an outer surface 10, an inner surface 8 and a plurality of ball receiving apertures 7; a plurality of webs 19, 20 provided on the outer surface of the inner race that engage the inner surface of the cage; and a ball 5 disposed in each ball receiving aperture of the cage. Figs. 2 & 4 show the webs extend generally parallel to the constant velocity joint's axis of rotation.

8. Claims 1, 3, 4 & 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Welschof, US 5,026,325. Figs. 1 & 2 show a constant velocity joint comprising: an outer race 101 with an opening defining an inner surface having a plurality of grooves 117 formed therein; an inner race 102 defining an outer surface having a plurality of grooves 118 formed therein; a cage 104 extending between the outer race and the inner race, the cage having an outer surface, an inner surface and a plurality of ball receiving apertures; a plurality of webs 105, 106 provided on the inner and outer surfaces of the cage that engage (see col. 6, lines 23 & 26) the outer

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surface 108, 110 of the inner race and the inner surface 109, 111 of the outer race; and a ball 103 disposed in each ball receiving aperture of the cage.

9. Claims 1, 4-6, 10 & 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Welschof, US 4,008,582. Figs. 1 & 2 show a constant velocity joint comprising: an outer race 1 with an opening defining an inner surface 2 having a plurality of grooves 3 formed therein; an inner race 6 defining an outer surface 9 having a plurality of grooves 7 formed therein; a cage 5 extending between the outer race and the inner race, the cage having an outer surface 8, an inner surface 10 and a plurality of ball receiving apertures (see also col. 3, line 24); a plurality of webs 11 provided on the inner surface of the outer race that engage the outer surface of the cage; and a ball 4 disposed in each ball receiving aperture of the cage. Fig. 1 shows the webs 11 extend generally parallel to the constant velocity joint's axis of rotation. Figs. 1 & 2 also show that plurality of webs 11 are provided on the outer surface 8 of the cage 5 so that they engage the inner surface 2 of the outer race 1.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Harz, Seguin, Meyer and Kobaysahi each show a constant velocity joint. Niedermeier shows a joint having many of the limitations of the claims.

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11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Binda whose telephone number is (703) 305-2869. The examiner can normally be reached on M-F 9:30 am to 7:00 pm with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (703) 308-2686. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Greg Binda
Primary Examiner
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